

CLAIMS

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1. A biologically active composition comprising a biologically active agent to be released therefrom, said biologically active agent being dissolved and/or dispersed in a carrier therefor, wherein said carrier is a liquid and/or solid non-crystalline matrix in which said biologically active agent is present in a supersaturated state, said supersaturated state being obtainable by subjecting one or more carrier starting substance(s) to such chemical operation(s) that said liquid and/or solid non-crystalline carrier matrix is provided in which the degree of saturation of said biologically active agent is higher than in said carrier starting substance(s), the biologically active agent being added before said chemical operation(s) has (have) been completed.

2. A composition according to claim 1, wherein said higher degree of saturation is the result of such chemical operation(s) that the solubility of the biologically active agent in said matrix is lower than the solubility thereof in said carrier starting substance(s).

25 Claim 2
3. A composition according to ~~any one of claims 1 and 2~~, wherein said higher degree of saturation is the result of such chemical operation(s) that the degree of dissociation, aggregation and/or degree of protonation of the biologically active agent is different from the degree of dissociation, aggregation and/or degree of protonation of said agent in said carrier starting substance(s).

9 4. A composition according to ~~any one of claims 1-3~~,
wherein said biologically active agent is added before
said chemical operation(s) has (have) been initiated.

5 5. A composition according to ~~any one of claims 1-3~~,
wherein said biologically active agent is added at a
predetermined point of time after said chemical
operation(s) has (have) been initiated, the composition
thus obtained then being further subjected to said
10 chemical operation(s).

6. A composition according to claim 5, wherein said
predetermined point of time is from 1 minute to 6 months,
15 preferably from 0,5 hours to 4 months after said chemical
operation(s) has (have) been initiated.

7. A composition according to claim 6, wherein the
composition is further subjected to said chemical
operation(s) for a time period of about from 1 minute to
20 6 months, preferably from 0,5 hours to 4 months.

9 8. A composition according to ~~any one of claims 1-7~~,
wherein said starting substance(s), or said formed non-
crystalline matrix, act(s) as a solvent or dispersing
25 medium.

9 9. A composition according to ~~any one of claims 1-8~~,
wherein said biologically active agent is added as a
solid and/or liquid which is subsequently dissolved in
30 said carrier.

10 10. A composition according to ~~any one of claims 1-8~~,
wherein said biologically active agent is added in
the form of a solution or dispersion.
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11. A composition according to ~~any one of claims 1-10~~, wherein said biologically active agent is added above or around room temperature. *Claim 1*

12. A composition according to ~~any one of claims 1-11~~, wherein said chemical operation(s) comprise one or more chemical reactions. *Claim 1*

13. A composition according to claim 12, wherein said chemical reaction(s) comprise etherifying, esterifying, hydrolysis, substitution, addition, elimination, oligomerising and/or polymerising reactions.

14. A composition according to claim 13, wherein said chemical reaction(s) is (are) selected and performed so as to provide optimal delivery rate of said biologically active agent.

15. A composition according to ~~any one of claims 1-14~~, wherein said chemical operation(s) involve(s) subjecting said carrier starting substance(s) to a temperature of from around -50°C to around 300°C, preferably around 0-150°C. *Claim 1*

16. A composition according to ~~any one of claims 1-15~~, wherein said chemical operation(s) is (are) conducted for a time period of from 1 minute to 6 months, preferably from 0,5 hours to 4 months. *Claim 1*

17. A composition according to ~~any one of claims 1-16~~, wherein said carrier starting substance, or mixture of two or more different carrier starting substances, is selected from monomers, acids, such as mono-, di- or triacids or higher acids, alcohols, including mono-, di- or triols, ketones, aldehydes, amines, amides, anhydrides, lactides, glycolides, saccharides and derivatives thereof, acrylic or acrylamide type. *Claim 1*

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compounds, such as methyl methacrylate, monomers of PEO-diacrylate, cyanoacrylate, acrylate saccharides including acrylate starch, acrylate lactate, acrylate glycolate, isocyanates, ethylene oxide, propylene oxide, pyrrolidone, PEO-diacrylate, ethylene-vinyl acetate, monomers of organic siloxanes, and oligomers, polymers or prepolymers thereof.

18. A composition according to claim 17, wherein the acid is a monomeric acid and the alcohol is a monomeric alcohol, said non-crystalline matrix comprising an ester and/or polyester thereof.

19. A composition according to claim 18, wherein said monomeric acid is citric acid.

Claim 18
20. A composition according to ~~any one of claims 18 and 19~~, wherein said monomeric alcohol is propylene glycol.

Claim 1
21. A composition according to ~~any one of the preceding claims~~, which consists of one liquid or solid phase only.

Claim 1
22. A composition according to ~~any one of the preceding claims~~, wherein the biologically active agent is a pharmaceutically active agent.

23. A composition according to claim 22, wherein the pharmaceutically active agent is selected from the group consisting of guanosides, corticosteroids, psychopharmaceutical hormones, oxicams, peptides, proteins, antibiotics, antivirals, antimicrobials, anticancer agents, antifungals, oestrogens, antiinflammatory agents, neuroleptic agents, melanocyte stimulants and gland stimulants, preferably stimulators

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of sebaceous and pilo-sebaceous glands, and agents with an effect on mast cell secretion.

24. A composition according to any one of claims 22 and 23 for use as a medicament.

25. A composition according to ^{claim 1} any one of the preceeding claims for topical, preferably dermal application to a mammal, preferably man.

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26. A method for the preparation of a biologically active composition comprising a biologically active agent dissolved and/or dispersed in a carrier therefor, wherein a carrier starting substance, or a mixture of two or more different carrier starting substances, is (are) subjected to such chemical operation(s) that a liquid and/or solid non-crystalline carrier matrix is formed, in which the degree of saturation of said biologically active agent is higher than in said carrier starting substance(s), said biologically active agent being added before said chemical operation(s) has (have) been completed and in an amount such that a supersaturated state is obtained.

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27. A method according to claim 26, wherein said composition is as defined in any one of claims 2-25.

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